

DOCKET FILE COPY OPPOINAL

10The SERRETARY RECEIVED FCC MAIL ROO! LEASE ASSOCIATE THESE HODITIONAL COMMENTS IN THE ATU PROCEEDING-PLEASE FIND AN ORICINAL X 15 (2 copies

124ES No.

No. of Copies rec'd

## Before the Federal Communications Commission

Washington DC MM Docket No. 87-268

To: The Commission Fireweed Communications Corp. KYES-(TV), Anchorage Alaska AFCIVED

JAN 23 1896

## In the matter of:

Advanced Television Systems & their impact Upon Existing Television Service

## **ERATTA**

In Comments dated January 15, 1996, Fireweed estimated the additional cost of Electricity and Transmission equipment for ATV would be about 12% of total Anchorage market advertising revenue. We made two errors. We included the cost of KAKM electricity in the total. We did not show the resulting total as \$2,164.000. We believe non-commercial TV should not be included in ATV cost calculations, since it is not included in total market revenue.

To make the estimation more clear, we have tabulated the estimation, and provided notes on our assumptions. The total cost of simultaneous ATV/NTSC operation, as a percentage of gross market revenue, 8% would, if required, have devastating effect upon the Anchorage television marketplace. Again, these estimate include costs of transmitter plant only. Not included are studio, translator, microwave link, program origination, or test and monitoring equipment costs. \$500,000 should be less than that required to pay for one UHF transmitter, antenna, tower, co-ax, and building or site rental. Also not included are possible upgrade to subsystems of the electrical utility that may be needed to supply a much higher electrical load in rural areas.

All dollar figures are annual cash outflow, not including tax consequences. All power is in Megawatts.

Call	ATV ERP average	Adjusted av. ERP	PEAK ERP	Peak TX pwr. out	Transmitter 10 year pay out.	Electric Bill \$.07 per kWh 100% eff. Tx
KTUU	4.1		10.0	.667	79,290.48	\$409,004
KTBY	.363		1.815	.121	79,290.48	74,197
KYES	.066	.66	3.3	.22	79,290.48	134,904
KAKN	1 1.1		5.5	.367	79,290.48	225,044
KTVA	.066		.66	.044	79,290.48	24,528
KIMO	.041	4.1	10.0	.667	79,290.48	409,004
ANNUAL TOTAL					\$396,452.40	\$1,051,637

**GRAND TOTAL** 

Percentage of 18 million market revenue

\$1,448,089.40

8%

PRESIDENT, EYES-GUI Flucuted Committee Comp

## ASSUMPTIONS:

Five Anchorage commercial VHF stations only. Excluded from totals; non-commercial KAKM and low power (20 kW NTSC ERP) Home Shopping affiliate, UHF KDMD. Miller Kaplan, an accounting firm, reports total Anchorage TV market gross cash revenue, at about \$18 million annually. KAKM and KDMD are not included in the Miller Kaplan report, thus should be excluded from the totals. KZXC, shown in the MST list does not exist, as a construction permit or application. It is excluded.

All stations operate 24 hours a day 7 days per week. In fact, at present one station shuts down a few hours each night. All must shut down occasionally for maintenance.

Present maximum UHF peak ERP is 5 megawatts. We assume no practical TV transmitter plant can exceed 10 megawatts ERP. According to the ATV channel plan filed by MST, KTUU, and KIMO will need greater than 20.9 megawatts peak power. We assumed loss of coverage and only 10 MW peak power.

We assumed, as does the MST channel plan, that stations do not change transmitter sites, or elevation.

We assume ATV peak power is 7 dB or five times average power, and transmitter electricity input power equals peak output power, as is the case with typical new, NTSC transmitters.

ATV transmitters must be built to meet peak power needs, as is the case with NTSC transmitters.

We assume transmitter and antenna cost \$500,000 for each station, in spite of variations between stations. We believe this cost under estimates the cost for KTUU, KAKM, KIMO. These stations use a common 880 foot tower at Goose Bay. If they operate a common ATV antenna system, they save antenna and tower cost. However, peak transmitter power for these stations totals 2 megawatts. UHF transmitters with peak powers of .667 megawatts have never been built. An antenna combiner at this power will be very expensive. To my knowledge, none have ever been built. Also, the size of their transmitter building will have to be nearly doubled. Thus \$500,000 per station may be a gross underestimate. On the other hand, expenses for KYES, KTBY, and KTVA could be the cost of an ordinary UHF transmitter, and new combination UHF & VHF antenna. \$200,000 for an installed transmitter and antenna, plus co-ax should be less than \$500,000. Therefore, we believe \$500,000 times five commercial stations is a conservative estimate for the purposes of this report.

We capitalize the \$500,000 by assuming 12 monthly lease payments at 10%, 10 years, zero buy back will equal \$6,607.54 per month per station.

We assume average horizontal antenna gain, including co-ax loss equals 15. Higher gains, up to 25 have been used. Highly directional antennas can direct energy toward populated areas, at the expense of rural areas. This can substantially reduce overall cost, below these estimates. However, sparsely populated areas will no longer get coverage.

We use power cost \$.07 per kWh. Actual cost to KYES is presently about 7.5 cents per kWh.

KIMO, has a CP and is now building a 316,000 watt ERP channel 13 plant at the same site as KTUU and KAKM., and will operate at the same relative NTSC power as KTUU. We assume KIMO and KTUU will use the same ATV power. KYES, which was operating at 6 kW ERP at the time the ATV list was drawn up, now operates at 100,000 watts ERP (directional), and will need 100/6 times more power than that shown in the ATV list for comparable coverage.